LISTING OF CLAIMS AND AMENDMENTS THERETO

1. (Currently Amended) A method of operating a continuous casting and rolling plant with a computing unit, including a plurality of slabs belonging to different production orders within sequences on the continuous casting and rolling plant, comprising:

determining the order of the slabs belonging to the production orders within the sequences with the computing unit by a genetic algorithm; and

controlling the continuous casting and rolling plant by the computing unit in accordance with the order determined~~, wherein controlling the continuous casting and rolling plant by the computing unit includes defining an operational sequence for the entire continuous casting and rolling plant~~.

2. (Previously Presented) The method as claimed in claim 1, wherein at least one of a selection, a recombination and a mutation is carried out by the genetic algorithm.

3. (Previously Presented) The method as claimed in claim 1,

wherein the order of the slabs belonging to the production orders within the sequences is determined with the computing unit by an event-oriented evaluation.

4. (Previously Presented) The method as claimed in claim 3, wherein solutions are evaluated according to quality by the event-oriented evaluation.

5. (Currently Amended) The method as claimed in claim 1, wherein a starting solution, as a starting point, is determined by the computing unit.

6. (Previously Presented) A continuous casting and rolling plant with a computing unit and means for carrying out the method as claimed in claim 1, wherein a plurality of slabs which belong to different production orders are produced within sequences on the continuous casting and rolling plant, wherein the computing unit contains a genetic algorithm for determining the order of the slabs belonging to the production orders within the sequences.

7. (Previously Presented) The continuous casting and rolling plant as claimed in claim 6, wherein an event-oriented evaluation is used for determining the order of the slabs belonging to the production orders within the sequences.

8. (Previously Presented) The method of claim 1, wherein the continuous casting and rolling plant is a thin-slab continuous casting and rolling plant.

9. (Previously Presented) The method as claimed in claim 2,

wherein the order of the slabs belonging to the production orders within the sequences is determined with the computing unit by an event-oriented evaluation.

10. (Previously Presented) The method as claimed in claim 9, wherein solutions are evaluated according to quality by the event-oriented evaluation.

11. (Previously Presented) The method as claimed claim 2, wherein a starting

solution, as a starting point, is determined by the computing unit.

12. (Previously Presented) The method as claimed claim 3, wherein a starting solution, as a starting point, is determined by the computing unit.

13. (Previously Presented) The method as claimed claim 4, wherein a starting solution, as a starting point, is determined by the computing unit.

14. (Previously Presented) The method as claimed claim 9, wherein a starting solution, as a starting point, is determined by the computing unit.

15. (Previously Presented) The method as claimed claim 10, wherein a starting solution, as a starting point, is determined by the computing unit.

16. (Previously Presented) A continuous casting and rolling plant with a computing unit and means for carrying out the method as claimed in claim 2, wherein a plurality of slabs which belong to different production orders are produced within sequences on the continuous casting and rolling plant, wherein the computing unit contains a genetic algorithm for determining the order of the slabs belonging to the production orders within the sequences.

17. (Previously Presented) A continuous casting and rolling plant with a computing unit and means for carrying out the method as claimed in claim 3, wherein a

plurality of slabs which belong to different production orders are produced within sequences on the continuous casting and rolling plant, wherein the computing unit contains a genetic algorithm for determining the order of the slabs belonging to the production orders within the sequences.

18. (Previously Presented) A continuous casting and rolling plant with a computing unit and means for carrying out the method as claimed in claim 4, wherein a plurality of slabs which belong to different production orders are produced within sequences on the continuous casting and rolling plant, wherein the computing unit contains a genetic algorithm for determining the order of the slabs belonging to the production orders within the sequences.

19. (Previously Presented) A continuous casting and rolling plant with a computing unit and means for carrying out the method as claimed in claim 5, wherein a plurality of slabs which belong to different production orders are produced within sequences on the continuous casting and rolling plant, wherein the computing unit contains a genetic algorithm for determining the order of the slabs belonging to the production orders within the sequences.

20. (New) A method of operating a plant, comprising:

using a genetic algorithm to operate a continuous casting and rolling plant in a substantially optimum manner.

21. (New) The method according to claim 1, further comprising determining an initial solution for determining an iteration process for operating the continuous casting and rolling plant.

22. (New) The method according to claim 1, further comprising determining a solution space defining data usable for operating the continuous casting and rolling plant.

23. (New) The method according to claim 3, wherein determining the solution space includes defining data pertaining to at least one of delivery dates, quantities to be delivered and order-related restrictions.

24. (New) The method according to claim 3, further comprising determining a solution for operating the continuous casting and rolling plant from the data.

25. (New) The method according to claim 5, further comprising simulating operation of the continuous casting and rolling plant using the determined solution.

26. (New) The method according to claim 6, further comprising evaluating technical characteristics of the continuous casting and rolling plant during the simulation

operation, the technical characteristics including at least one of a number of casting strands, a number and type of continuous caster, a number of slab strands passed through a furnace, and a number and type of rolls in a mill.